

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
1 National Life Drive, Main 2
Montpelier, VT 05620-3521

DRAFT
INDIRECT DISCHARGE PERMIT

Permit No.: ID-9-0327
PIN: SJ17-0023

SECTION A – “ADMINISTRATION”

In compliance with provisions of 10 V.S.A. §1263, and in accordance with the following conditions, the permittee:

Copper Pig Brewery, LLC
5985 Route 102
Guildhall, VT 05905

is authorized to discharge non-sewage, food processing wastewater from the manufacturing of beer at the permittee’s brewery in Guildhall, Vermont to a manure pit located on a farm in Guildhall, Vermont. The wastewater will be generated from the cleaning of brewery equipment and kegs, rinsing growlers and glasses, and from the disposal of waste beer. The resulting manure/wastewater mixture is expected to be managed in accordance with the Vermont Agency of Agriculture’s Required Agricultural Practices. This is a new indirect discharge permit.

A1. Permit Summary:

Expiration Date	March 31, 2022
Type of Waste	Non-Sewage Brewery Wastewater
Waste Generated	Estimated 30,240 gallons per year
Disposal System	Discharge of wastewater to manure pit and then managed in accordance with Required Agricultural Practices
Drainage Basin	Upper Connecticut River
Capacity Available for Non-Manure Wastes (10% of Total Pit Capacity)	35,685 gallons per year

A2. Compliance Schedule:

The following schedule summarizes the actions and requirements necessary for compliance with the conditions of this permit. The permittee shall complete the requirements in accordance with the dates indicated. See the designated section for specific details.

<u>Condition # & Description</u>	<u>Schedule Date</u>
A3. Apply for renewal of Indirect Discharge Permit	December 31, 2021
D1. Perform wastewater sampling and analyses	Semi-Annually
D2. Submit disposal report	Quarterly
D3. Other monitoring	As required

A3. Expiration Date:

This permit, unless revoked or amended, shall be valid until March 31, 2022 despite any intervening change in Water Quality Standards or the Vermont Guidelines for Land Application of Dairy Processing Wastes. Renewal of this Indirect Discharge Permit will be subject to all rules applicable at the time of application for renewal, including biological standards to determine significant alteration of aquatic biota.

The permittee shall apply for an Indirect Discharge Permit renewal by December 31, 2021 for continued authorization to discharge brewery wastewater. For the purposes of Title 3, an application for renewal of this indirect discharge permit will be considered timely if a complete application is received by the expiration date.

A4. Effective Date:

This permit becomes effective on the date of signature.

A5. Revocation:

The Secretary may revoke this permit in accordance with 10 V.S.A. §1267.

A6. Transfer of Permit:

This permit is not transferable without prior written approval of the Secretary. The permittee shall notify the Secretary immediately, in writing, before any sale, lease or other transfer of ownership of the property from which the permitted discharge originates. The proposed transferee shall make application for a permit to be reissued in their name. Failure to apply shall be considered a violation of this permit. Responsibility for compliance with the conditions of this permit shall be the burden of the permittee until such time as transfer of the permit to the transferee is complete. All application and operating fees must be paid in full prior to transfer of this permit. This permit shall be transferred only upon showing by the permittee or proposed transferee of compliance with the following conditions:

- a. The transferee shall be a legal entity, financially and technically competent to operate, inspect, maintain and replace the system.
- b. The transferee shall demonstrate that they have the legal authority to raise revenues for the proper operation, inspection, and maintenance of the system.
- c. The transferee shall provide a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee to the Secretary.

A7. Minor Modifications of Permit:

The Secretary may modify this permit without requiring a permit application, a public notice, or a public hearing to correct typographical errors or increase the frequency of monitoring or reporting in accordance with Condition D(3) of this permit.

A8. Indirect Discharge Rules:

This indirect discharge was reviewed and qualified for an Indirect Discharge Permit in accordance with the Vermont Water Quality Standards; Section 14-1902(c) of the Indirect Discharge Rules; and the Vermont Guidelines for Land Application of Dairy Processing Wastes.

A9. Right of the Agency to Inspect:

The permittee shall make arrangements to insure that the Secretary or the Secretary's authorized representatives, upon the presentation of their credentials and at reasonable times:

A9. Right of the Agency to Inspect (continued):

- a. To enter upon any field or inspect any manure pit being used as a disposal site;
- b. To enter upon permittee's premises in which any effluent source, treatment or storage system is located or in which any records are required to be kept under the conditions of the permit;
- c. To have access to and copy any records required to be kept under conditions of this permit;
- d. To inspect any monitoring equipment or method required in this permit;
- e. To sample any discharge of waste, groundwater or surface water; or
- f. To inspect any collection, treatment, pollution management or disposal facility required by this permit.

A10. Permit Availability:

A copy of this permit shall remain at the office of the permittee and, upon request, shall be made available for inspection by the Secretary.

A11. Modifications and Additions to Disposal System:

The permittee may request to add additional manure pits to be utilized for disposal in accordance with the following:

- a. submittal of an application for an administrative amendment of this permit to update the authorized list of manure pits in Attachment A.
- b. submittal of a written agreement between the permittee and the farmer(s). Each agreement must state the location and volume of the farmer's manure pit, state that the farmer agrees to manage the wastewater/manure mixture in accordance with Required Agricultural Practices, and be signed and dated by both parties. Documentation verifying the construction and volume of the pit(s) must also be submitted.

A12. Operating Fees:

This indirect discharge is subject to operating fees. The permittee shall submit the operating fees in accordance with procedures provided by the Secretary.

SECTION B - "INDIRECT DISCHARGE"

B1. Nature of Indirect Discharge:

The wastewater authorized for disposal by this permit is a food processing wastewater generated from the cleaning of brewery equipment and kegs, rinsing growlers and glasses, and from the disposal of waste beer from the permittee's brewery in Guildhall, Vermont. The spent grains will be used as animal feed. The wastewater will be collected in a 1,000-gallon concrete holding tank and transported from the brewery and disposed of in a manure pit on a farm in Guildhall, Vermont. The permittee anticipates generating approximately 30,240 gallons of wastewater per year.

Based on analytical results from other breweries with similar processes, the wastewater is expected to have the following approximate concentrations:

Biochemical Oxygen Demand (BOD)	640 – 14,000 mg/L
Total Kjeldahl Nitrogen (TKN)	15 – 300 mg/L
Nitrate Nitrogen	3 – 45 mg/L
Total Phosphorus	6 – 70 mg/L
Chloride	35 – 940 mg/L
Sodium	27 – 1,100 mg/L
pH	4.82 – 5.96 S.U.

These are not permit limits and exceedances of these values may occur.

B2. Chemicals Used:

The permittee has submitted a description of the chemicals, including amounts used, and the Material Data Safety Sheets for the chemicals which will be used for cleaning kegs and equipment at the facility. These chemicals are common cleaning and sanitizing agents used in the dairy and brewing industry and are the only chemicals which could potentially be found in the wastewater. Prior to making any changes in the chemicals used, the permittee shall submit a request for evaluation of the new chemicals to the Secretary. If the Secretary determines that the change in chemicals is a significant change, the permittee shall be required to apply for a permit amendment. Minor changes in chemicals used, as determined by the Secretary, will not require permit amendment. For those chemicals which are obtained from a different supplier or source and are identical to the chemicals listed in the application, the permittee shall notify the Secretary of the change and no evaluation will be necessary.

SECTION C - "SYSTEM OPERATION"

C1. General:

The wastewater shall be handled at all times in a manner that will (1) not permit the surface runoff of wastewater to waters of the State and (2) not result in a violation of the Vermont Water Quality Standards.

C2. Limits on Disposal:

This permit authorizes only the discharge of non-sewage wastewater from the Copper Pig Brewery in Guildhall, Vermont to the manure pit identified in Attachment A. The maximum disposal capacity at the farm is 35,685 gallons per calendar year for non-manure wastes. The resulting manure/wastewater mixture is expected to be managed in accordance with the Vermont Agency of Agriculture's Required Agricultural Practices.

C3. Quarterly Disposal Report:

On a quarterly basis, the permittee shall submit a written report to the Secretary listing 1) the dates in which disposal occurred, 2) the farm where disposal occurred, and 3) the daily volume in gallons discharged to the manure pit for the previous quarter. The report shall be signed by the permittee under the following certification language:

"I certify under penalty of law that I have personally examined, and am familiar with, the information submitted herein. I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment."

The quarterly reports shall be submitted by the 15th day of January, April, July and October for the previous quarter.

SECTION D - "MONITORING"

D1. Monitoring Requirements:

Upon the effective date of this permit, the permittee shall sample and analyze the wastewater as follows:

<u>Parameter</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sample Frequency</u>
Sodium (Na+)	mg/L	grab	Semi-Annually
Chloride (Cl-)	mg/L	grab	Semi-Annually
Total Phosphorus	mg/L	grab	Semi-Annually
Potassium (K)	mg/L	grab	Semi-Annually
Total Kjeldahl Nitrogen (TKN)	mg/L	grab	Semi-Annually
Nitrate Nitrogen	mg/L	grab	Semi-Annually
pH	S.U.	grab	Semi-Annually

The semi-annual period is January - June and July - December. If any disposal of wastewater occurs during a semi-annual period, a sample is required to be collected and analyzed. Samples shall be taken from the holding tank after agitation of the contents of the tank.

The results of the analysis shall be submitted to the Secretary by the 15th day of the second month following the date of sampling.

D2. Sampling and Testing Procedures:

All wastewater and groundwater sampling, preservation, handling and test procedures used to comply with the monitoring requirements herein shall conform to procedures specified in the most current edition of Standard Methods for the Examination of Water and Wastewater APHA-AWWA-WPCF, and Vermont Water Quality Standards unless written approval of an alternate method is received from the Agency.

The laboratory utilized for analyzing the samples shall demonstrate successful participation in third party proficiency testing recognized by ISO or NELAP for all parameters and shall analyze any check sample provided by the Secretary. Failure to obtain an acceptable result for either the Secretary's check sample or successful third party proficiency testing may be a basis for requiring an alternate analytical laboratory.

D3. Other Water Quality Monitoring:

No other water quality monitoring of the system is required under this permit. However, the Secretary reserves the right to require additional monitoring of the system in accordance with Condition A(7) should operation of the system fail to meet the requirements of Sections C(1) and C(2).

SECTION E - "COMPLIANCE REVIEW"

If the results of any monitoring or reporting indicate that there is a possibility that the Vermont Water Quality Standards may be violated, the Secretary may require monitoring of groundwater and/or surface water. If continued monitoring and analysis indicates that a violation of the wastewater discharge rate or a violation of the Vermont Water Quality Standards has occurred, is occurring, or is likely to occur, the Secretary may require the permittee to take appropriate corrective actions to eliminate or reduce the possibility of a violation.

The issuance of this Indirect Discharge Permit, ID-9-0327, to Copper Pig Brewery, LLC by the Secretary relies upon the data, design, judgment and other information supplied by the applicant, the applicant's consultants and other experts who have participated in the preparation of the application. The Secretary makes no assurance that this system will meet the performance objectives of the applicants and no warranties or guarantees are given or implied.

SECTION F - "EFFECTIVE DATE"

This Indirect Discharge Permit, ID-9-0327, issued to Copper Pig Brewery, LLC for the discharge of non-sewage wastewater from the Copper Pig Brewery in Guildhall, Vermont to the manure pit listed in Attachment A, is effective on this _____ day of May, 2017.

Emily Boedecker, Commissioner
Department of Environmental Conservation

By: _____ **DRAFT** _____
Bryan Redmond, Director
Drinking Water and Groundwater Protection Division

ATTACHMENT A

List of Approved Manure Pits for Disposal of Copper Pig Brewery Wastewater

May, 2017

Farm	Location	Manure Pit Capacity¹	Capacity Available for Non-Manure Wastes¹
Richard Martin Farm	1066 Route 102 Guildhall, Vermont	356,850 gallons	35,685 gallons/year

Note:

1: Based on calculations by the U. S. Dept. of Agriculture Soil Conservation Service.